

PHOTOGRAPHY

FAQ

Q What are white balance modes?

A You might think that cameras should try to capture light as accurately as possible, but this isn't always the case. Digital cameras have built-in image processing, which provides ways of improving the raw colours captured by the charge-coupled device (CCD).

A light bulb isn't only dimmer than sunlight; it's also more yellow. Our eyes become accustomed to this, but it can give photos a yellow cast. Some cameras adjust for this automatically, but white balance presets enable you to tell the camera what the light source is so it can process the image accordingly. A custom white balance mode is the most effective – you simply point the camera at a white object, such as a piece of card, to calibrate the camera.

Ben Pitt

Music and photography expert

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FUJIFILM FinePix F11 Zoom

★★★★★

£241 inc VAT

The F11 is an update to Fujifilm's F10 Zoom, which won a Best Buy award in *Labs, Shopper* August 2005. The most significant improvement is the addition of aperture and shutter speed priority modes, which is great news for creative photographers.

Aperture priority gives control over the depth of field to give either a sharp focus across the whole picture (useful for action shots) or at just a specific distance to draw attention to a particular part of a photo. As the aperture is adjusted, the camera automatically adjusts the shutter speed to compensate, maintaining a well-exposed photo.

Manual exposure is strangely absent, though, and the nominal Manual setting is really just a program mode with exposure compensation, white balance, focus and metering options that are not available in Auto mode. It's possible to deliberately under- or overexpose photos in shutter priority mode, but there's no visual feedback to show how your picture will come out before you take it.

Other improvements over the F10 include an increased screen resolution (from 115,000 to 153,000 pixels) and a 64MB rather than 16MB memory card, although with photos coming in at 3MB each, a 256MB card is a sensible minimum.

Otherwise, the camera is largely unchanged, which is a good thing on the whole. The aluminium body is smart and compact, and the chunky lithium-ion battery holds enough charge for around 500 shots. It's extremely fast at focusing, capturing and preparing for the next picture, taking an average of 1.6 seconds between shots. Although Fujifilm's layout of menus is a little unusual, being

SUMMARY

- ✓ Well-exposed shots
- ✓ Noise-free images
- ✓ Long battery life
- ✗ Focus is sometimes a little soft

DIGITAL CAMERA 6.3 megapixels (2,848x2,136 pixels), 3x optical zoom, 64MB xD-Picture Card, 1,950mAh lithium-ion battery
PART CODE N077250A
SUPPLIER www.savastore.com
DETAILS www.fujifilm.co.uk



arbitrarily split into two sections available via different menu buttons, it doesn't take long to learn where everything is, and from then on the camera is fast and satisfying to use.

Photos were sometimes a little over-saturated and greenery sometimes took on a slightly turquoise tinge, but otherwise colours were captured with impressive accuracy. Skin tones always looked flattering, even under the flash, and the automatic white balance wasn't fooled by artificial lighting or direct sunlight.

The real highlight is the camera's ability to capture at up to ISO 1600 with as little image noise as most cameras exhibit at ISO 100. As a result, the F11 can

take well-exposed, noise-free photos in low light without resorting to blur-inducing long shutter times. However, we found that some photos were slightly lacking in sharpness, despite using high shutter and low ISO speeds.

Image quality niggles prevent the F11 getting full marks, but its features, quality, performance and price add up to an extremely attractive package.

Ben Pitt

Also consider...

OLYMPUS SP-350

★★★★★

£243 inc VAT



The Olympus SP-350 may be small

enough to fit in a handbag or a pocket, but its accessory hotshoe and threaded lens ring prove it's no mere point-and-click camera. It provides program, aperture priority, shutter priority and full manual controls, and histogram and exposure value (EV) readouts are there to help. In our tests it excelled at capturing detail both in bright and dark areas of high-contrast compositions.

The SP-350 has excellent image quality and is extremely competitive for such a versatile camera.

DIGITAL CAMERA 8 megapixels (3,264x2,448 pixels), 3x optical zoom, 25MB internal memory, xD-Picture Card slot PART CODE 003753 SUPPLIER www.pcwb.com DETAILS www.olympus.co.uk www.samsung.co.uk ✓ Superb image quality ✗ Not particularly fast
FULL REVIEW Mar 2006



NIKON CoolPix 5600

★★★★★

£120 inc VAT



Nikon's CoolPix 5600 is a low-cost, no-frills

camera. The lack of manual settings will put off the amateur photographer, but the point-and-click crowd will love its ease of use and excellent image quality.

The 5-megapixel sensor captures photographs in fine detail and exemplary colours in a range of conditions. In low light without the flash it resorted to exposure times of up to two seconds, but we prefer this to underexposed, grainy images captured in low light with a short exposure. Quite a bargain.

DIGITAL CAMERA 5 megapixels (2,592x1,944 pixels), 3x zoom lens, 14MB internal memory and SD slot PART CODE VAA310EO SUPPLIER www.buyacamera.co.uk DETAILS www.nikon.co.uk ✓ Great photos in a compact, affordable package ✗ Basic controls FULL REVIEW Jan 2006



SONY DSC-N1

★★★★★

£317 inc VAT

Sony's DSC-N1 is one of the first cameras we've seen with a 3" screen (along with Sanyo's Xacti E6 on page 32). Its 235,000-pixel resolution is twice that of the vast majority of camera screens, but even more unusual is its touch sensitivity.

The camera has barely any buttons, and you access everything but snapping and zooming by prodding the screen. This alone promotes the N1 to the position of cool gadget, and the overall design doesn't let it down in this department. However, the camera's curved sides make it appear slimmer in print than it is in the flesh, and at 185g it isn't particularly light. The 25MB internal memory holds only six photos at maximum quality and upgrading with Memory Stick Pro Duo cards is more expensive than with other cameras' SD cards.

The touch screen comes into its own in spot focus mode: simply touch the area of the image you want to focus on. However, the interface's heavy reliance on menu navigation slows operation down, and the touch-screen isn't as responsive as normal buttons.

Some tasks are particularly convoluted. In manual exposure mode, for example, the shutter speed and aperture settings are accessible only by delving into the menu and they disappear once you have taken a picture, so you need to find them again from the menu if you want to make any further adjustments. Deleting a photo takes four onscreen button

presses and there's no delete all function. Otherwise the camera is responsive, taking less than two seconds between shots, although in low light the auto-focus takes an additional second or two to lock on to its subject.

An Album function retains low-resolution versions of deleted pictures, enabling you to browse all shots taken with the camera. This is a nice idea, but it makes permanently deleting pictures even more long-winded and is bound to mean that some people will inadvertently show people pictures they thought were long gone. Fortunately, there's an option deep within the Setup menu for switching it off.

A good range of more conventional features is available, including contrast and saturation, but there are no priority modes for depth of field effects while maintaining automatic exposure. In manual exposure mode, aperture, shutter speed, ISO and flash settings are reflected in the preview image's brightness and an exposure value (EV) readout, although these didn't always relate accurately to the resulting photograph.

Image quality is extremely impressive, as we'd hope from a camera that costs more than £300. The optics live up to the 8.1-megapixel resolution, providing levels of sharpness and detail that resembled those from digital SLR cameras more than other compacts we've seen. Areas of solid colour were smooth, and subtle

shades were accurately differentiated. Most pictures had barely any discernable image noise, and even at ISO 400 it wasn't intrusive, although the ISO 800 setting relies on heavy noise reduction, resulting in a sponge-painting effect when viewed up close.

Best of all is the camera's Auto mode, which coped flawlessly with a wide range of lighting conditions. Direct sunlight, artificial light, flash photography and high contrast scenes all produced pictures with exposure and white balance that we simply couldn't fault. It even produced a perfectly exposed shot in almost complete darkness, albeit with a one-second exposure time.

The DSC-N1 captures video in MPEG1 format at VGA resolution, which would be excellent if it weren't for the fact that every third frame was missing, which made playback stutter badly.

We'd usually expect greater, more accessible manual control on a camera at this price, but if you just want a point-and-shoot camera with fantastic image quality and don't mind splashing out, the DSC-N1 fits the bill.

Ben Pitt



SUMMARY

- ✓ Sumptuous image quality
- ✓ Huge screen
- ✗ No priority modes
- ✗ Problematic video mode

DIGITAL CAMERA 8.1 megapixels (3,264x2,448 pixels), 3x optical zoom, 25MB internal memory, Memory Stick Pro Duo slot, 960mAh lithium-ion battery PART CODE DSCN1.CEH
SUPPLIER www.pcwb.com
DETAILS www.sony.co.uk

EPSON Perfection 2580 Photo

★★★★★

£88 inc VAT

BEST BUY The Epson 2580 Photo's lid contains an unusual motorised film feeder for loading strips of negatives. It feels sturdy and was very quick in operation, previewing six negatives in just 31 seconds. Despite its modest optical resolution, the Perfection 2580's crisp and detailed film scans are excellent, as are its reflective scans.



SCANNER 2,400x4,800dpi optical resolution, 48-bit colour, USB Hi-Speed PART CODE B11B172122
SUPPLIER www.shopmagenta.com DETAILS www.epson.co.uk
✓ Excellent film scans ✗ Slight softness to reflective scans
FULL REVIEW Sep 2005

NIKON D50

★★★★★

£429 inc VAT

BEST BUY Nikon's D50 is the cheapest digital SLR camera we've reviewed. It offers great versatility and, like all SLRs, changeable lenses. The supplied lens is OK, but you'll probably want to upgrade it.

The D50 captures photos at a resolution of 3,008x2,000, and we found its shots to be rich and detailed and to exhibit a subtlety of colour that's not found in a compact camera. This camera is truly excellent value.

DIGITAL CAMERA 3,008x2,000 resolution, 18-55mm lens (27-83mm 35mm equivalent), takes SD memory PART CODE D50(UK) 18-55KIT SI SUPPLIER www.currys.co.uk
DETAILS www.nikon.co.uk ✓ Affordable digital SLR camera ✗ Difficult to master FULL REVIEW Dec 2005



CANON PowerShot A610

★★★★★

£166 inc VAT

BEST BUY Canon's PowerShot A610 is fairly large, but it fits comfortably in your hand. Its picture quality is amazing, and it coped flawlessly with tricky lighting conditions such as high contrast and near darkness, and its macro function made objects just 2cm wide fill the picture. With its excellent video mode and manual focus, the A610 is better than many more expensive cameras.



DIGITAL CAMERA 5 megapixels (2,592x1,944 pixels), 4x optical zoom, 32MB SD card PART CODE 0322B007AA
SUPPLIER www.savastore.com DETAILS www.canon.co.uk
✓ Fantastic image quality ✗ Bulky design
FULL REVIEW Jan 2006

NIKON Coolpix S3

★★★
£199 inc VAT

Ultra-compact cameras such as Nikon's Coolpix S3 are great for keeping with you at all times, ready to immortalise those unexpected events. Its aluminium body and recessed lens should survive life in a handbag or pocket, and the smooth finish and lack of extrusions aid portability. However, they also give the camera a certain soap-like quality, so we strongly recommend using the supplied strap to avoid dropping it.

The 2.5" screen dominates the back of the camera, but despite a decent smattering of buttons, user control is pretty limited. The lack of aperture and shutter speed controls is typical of an ultra-compact camera, but we were disappointed to see that there are no metering or focusing modes other than macro. A Face Priority feature is designed to recognise and focus on faces but we didn't notice it working. The camera usually takes two or three seconds between shots, but in low light the auto-focus mechanism increases this to around five seconds.

Image quality was disappointing. There was a lack of sharpness in photos taken with a shutter speed of less than $\frac{1}{100}$ seconds, which



SUMMARY

- ✓ Extremely compact
- ✗ Flawed image quality
- ✗ Limited controls

DIGITAL CAMERA 6 megapixels (2,816x2,112 pixels), 3x optical zoom, 12MB internal memory, SD slot, 730mAh lithium-ion battery
PART CODE VAA600B1
SUPPLIER www.jessops.com
DETAILS www.nikon.co.uk

suggests the compact design isn't particularly easy to hold steadily. More worrying is that the camera chose a small aperture and a $\frac{1}{40}$ -second exposure time in certain outdoor shots, again causing a slight blur. The wide apertures of other cameras allow shutter speeds of $\frac{1}{300}$ seconds in the same conditions. Artificially lit subjects had an orange cast, although the Incandescent white balance

mode fixed this. Image noise was higher than usual, and unacceptably so at ISO 400.

The need to grapple with white balance presets, the ill-advised automatic aperture settings and the leisurely performance limit this camera's suitability for impromptu snapping.

Ben Pitt

CHOOSING A... Digital Camera

Follow the steps to find your ideal specs

RESOLUTION: 4 megapixels
ZOOM: 3x optical
MONITORING: 1.8" colour LCD screen
SUPPLIED MEMORY: 16MB
BATTERIES: Disposable
 Recommended minimum in grey

1 A digital camera with the specifications shown in grey above will suit someone looking for a point-and-click camera that produces images that look decent when printed at 7x5".

It has an LCD screen for previewing, reviewing and deleting shots and for changing the settings. These days such cameras cost under £100. Cheaper models are available, but their basic quality means they are best avoided.

2 An additional optical viewfinder allows you to take pictures when strong sunlight makes the LCD screen hard to see. It also lets you preserve batteries by switching the screen off.

3 The camera's top resolution depends on the size of its charge-coupled device (CCD) sensor. A 4-megapixel camera produces 2,288x1,712 photos, but with higher resolutions you can enlarge photos more without making them blocky. Five megapixels is common, and you can get six or eight megapixels without spending a fortune.

4 A digital zoom only guesses the extra detail required to zoom in on a subject. Far better is an optical zoom with a moving lens that enlarges the image projected on the CCD. The lens should also have a quick and accurate auto-focus.

5 Serious photographers need manual control over focus, aperture, shutter speed and white balance and, ideally, plenty of buttons for quick access to these functions. Many cameras offer preset modes to improve results.

6 Consider hidden costs. Most cameras will require a memory card upgrade to at least 128MB if they are to hold more than a dozen pictures at a time. Some come with internal rechargeable batteries, making the camera compact, while some also accept AA batteries, allowing you to carry spares.

SANYO Xacti VPC-E6

★★★★
£210 inc VAT

Sanyo isn't the most prolific camera designer, but it's arguably one of the more adventurous. The E6's sleek design is surprisingly comfortable to hold, while at the back there's a gigantic 3" screen with a 230,000-pixel resolution and smooth response when composing shots. The touch-sensitive shutter button is unusual too – simply making contact engages the auto-focus, and the gentlest of squeezes captures a picture. This makes taking shots extremely quick (a fast auto-focus and just two seconds between shots help here, too) but we couldn't get used to the touch-sensitive shutter button. Fortunately, there's an option to make it behave more conventionally, with a half-press for auto-focus and a full-press for capture.

Otherwise, the E6 works much like other point-and-shoot digital cameras, with all the essential options and scene presets but no aperture or shutter speed control. The slim design limits the battery size and capacity, so we got only 150 shots from a single charge. Manual focus is available, but with no numerical readout or picture-in-picture to help with focusing, even this screen can't provide enough detail for accurate adjustment.



SUMMARY

- ✓ Enormous screen
- ✗ Short battery life
- ✗ Auto mode needs help for indoor shots

DIGITAL CAMERA 6 megapixels (2,816x2,112 pixels), 3x optical zoom, 16MB internal memory, SD slot, 720mAh lithium ion battery
PART CODE VPC-E6EXS
SUPPLIER www.amazon.co.uk
DETAILS www.sanyo.co.uk

Image quality ranged from decent to excellent in our tests. Colours were punchy, although skin tones revealed a slight red cast, particularly in artificial lighting. Low light performance was reasonable after we selected ISO 400 to avoid long exposure times, which lead to blur. The macro mode focused down to 1cm for extraordinarily detailed close-ups. Video capture benefited from a smooth automatic exposure and, unusually, the optical zoom is available in video mode, but sound quality was a little light on bass.

This is a competent camera for the style-conscious snapper, but while the superb screen pushes its appeal up a notch, the battery life takes it down.

Ben Pitt